Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_

**AP Biology: Unit 1, DBA #3 Review**

Ms. OK, 2014-2015

**Objectives Assessed:** Topic 3 (The Importance of Genetic Variation as Fuel for Natural Selection), Learning Targets E-G

***Practice Questions:*** *Answer the following questions thoroughly and accurately in preparation for your Daily Biology Assessment.*

1) Describe the basic structure of the DNA molecule and its parts.

2) What are mutations and when do they occur? Do they increase or decrease genetic variation in a population?

3) Describe what happens during crossing over and explain how it increases genetic variation in a population.

4) Describe what happens during independent assortment and explain how it increases genetic variation in a population.

5) What is random fertilization, and how is it related to genetic variation in a population?

6) Why is genetic variation in a population a positive thing?

7) Explain why the following statement is incorrect: “Evolution creates new traits.”